

What we claim is:

1. An arrangement in a mammography equipment, providing a well defined and comfortable positioning and fixation of a breast, the equipment including an x-ray source and an area of exposure for a breast, wherein the device includes an essentially elastic container, consisting of an x-ray permeable material, arranged in said exposure area between two compression plates, said container being arranged such that upon the supply of a medium it expands and pressurizes said breast against said compression plate.
2. An arrangement according to claim 1, wherein a contact surface between the container and the breast exhibits a receiving space such that the compression force is essentially uniformly distributed all over the breast.
3. An arrangement according to claim 1, wherein the container is a pillow, arranged on a lower plate in the exposure area.
4. An arrangement according to claim 1, wherein one contact surface of the container completely or partly surrounds the breast.
5. An arrangement according to claim 4, wherein container is made from a fabric, a polymer or/and rubber material.
6. An arrangement according to claim 1, wherein the medium is gaseous.
7. An arrangement according to claim 6, wherein the medium is air.
8. An arrangement according to claim 7, wherein the medium is a fluid or a solid medium of smaller components.
9. An arrangement according to claim 8, wherein the medium is water.
10. An arrangement according to claim 1, wherein the device includes attachments to the container, for a tight containment of said supplied medium and one or more inlets and outlets intended for the medium.

BEST AVAILABLE COPY

BEST AVAILABLE COPY

11. An arrangement according to claim 10, wherein the inlet of the container is attached to a controllable compressor.

12. An arrangement according to claim 11, wherein the device includes a connection  
5 for a device for the disposal of the medium.

13. An arrangement according to claim 11, wherein the device includes a measuring  
apparatus to measure and guide the compression force by means of the pressure in  
the container.

10 14. An arrangement according to claim 1, wherein the device includes a display unit  
for reading the pressure inside the container.

15 15. An arrangement according to claim 1, wherein the container is filled with a  
tempered medium.

16. A compression procedure during an x-ray exposure in an x-ray apparatus, for a  
well defined and comfortable positioning and fixation of a breast, whereby said breast  
is arranged on an essentially elastic container, consisting of an x-ray permeable  
20 material, arranged in an exposure area, wherein the container expands when supplied  
by a medium, whereby the organ is fixed, positioned and pressurized.

BEST AVAILABLE COPY

BEST AVAILABLE COPY